عنوان مقاله:

(Role of Seed and Gibberellic Acid on Return Bloom in Olive (Olea europaea L. c.v. 'Tokhme Kabki'

محل انتشار:

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خلاصه مقاله:

Alternate bearing is one of the most important problems in olive production around the world. This experiment was performed on ۲۵-year-old olive trees of Tokhme Kabki cultivar in an olive orchard located in Shiraz, in ۲۰۱۸-۲۰۱۹. In this experiment, the role of normal fruits, shot berries, fruit removal, and Gibberellic Acid (GA۳) application on the amount and type of return flower were determined. We demonstrated that seed has a significant role in flower induction in olive. Shot berry fruits actually induced return bloom and removing the fruit before pit hardening stimulates induction of flower bud in 'Tokhme Kabki' olive cultivar. GA۳ application before pit hardening significantly inhibited flower formation. Endogenous GA۳-like substances was also determined in fruit flesh and seed tissues support the idea that, high concentration of GA۳-like during pit hardening is responsible for the inhibition of flowering. According to the rapid increase in GA۳-like substances in the fruit tissues, it appears that this compound may be transferred to the buds and then directed toward vegetative growth. Data suggest that GA۳-like level in the fruit flesh and seed tissues is one of the main factors in alternate bearing of olive tree. Therefore, thinning the seeded fruit till ۶ weeks after full bloom or before pit hardening would be effective in reducing the concentration of GA۳ in the olive tree and reducing the severity of alternate bearing.

کلمات کلیدی:

Alternate bearing, Full bloom, GA۳ application, Seeded fruit, Shotberry fruit.